Montana Department of Natural Resources and Conservation Water Resources Division Water Rights Bureau

ENVIRONMENTAL ASSESSMENT

For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

- 1. Applicant/Contact name and address: City of Kalispell, PO Box 1997, Kalispell, MT 59903-1997
- 2. Type of action: Permit to Appropriate Water 76LJ 30030092
- 3. Water source name: Groundwater
- 4. Location affected by project: SW¼ NW¼ SW¼ of Section 25 T29N R22W, Flathead County
- Narrative summary of the action to be taken, proposed project, purpose, and benefits: The DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met. The City of Kalispell recently drilled and constructed a new Public Water Supply Wells (PWS) well to serve an expanded service area to the north and west of the existing city limits. The well has a 12-inch diameter casing completed at a depth of 400-feet below ground surface. The point of diversion (POD) is located in the SW¼ NW¼ SW¼ of Section 25. The West View well will pump both into the city distribution system and a new two million gallon concrete water tank located in the NW ¼ NW ¼ SW ¼ of Section 29 T28N R22W to be used for storage when demand is high. The applicant is seeking a water use permit for 1200 gallons per minute (gpm) up to 1294 acre-feet for municipal purposes. Kalispell will benefit by helping to accommodate the expanded service area and predicted future growth of municipal water supply demands. The scope of this EA is limited to the appropriation of water. It does not discuss impacts of the expanded service area that this agency only records as the place of use.
- 6. Agencies consulted during preparation of the Environmental Assessment: (include agencies with overlapping jurisdiction)

Department of Environmental Quality Natural Heritage Program State Historic Preservation Office

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

<u>Water quantity</u> - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

Determination: Not applicable, the source is groundwater.

<u>Water quality</u> - Assess whether the stream is listed as water quality impaired or threatened by DEO, and whether the proposed project will affect water quality.

Determination: Not applicable, the source is groundwater.

<u>Groundwater</u> - Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

Determination: The proposed well will derive groundwater from the deep artesian aquifer within the Flathead Valley. Hydrogeologic information indicates that the deep artesian aquifer is present valley-wide, encompassing an area of approximately 300 square miles. The primary recharge to the aquifer is from snowmelt infiltration in the surrounding mountain ranges. The requested appropriation will have minimal impact to the quality and supply of this groundwater source.

<u>DIVERSION WORKS</u> - Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.

Determination: The West View well was drilled by a licensed well driller and comply with Administrative Rules of Montana, Title 37, Chapter 43, MCA and Title 36, Chapter 21, ARM. The well design was approved as required for a Public Water Supply by the Montana Department of Environmental Quality.

WELL COMPLETION DETAILS	
	West View Well
Total Depth	400 feet
Static Water Level (bmp)	143.2 feet
Grout Seal Depth	75 feet
Well Casing Diameter	12-inch ID
Depth Installed	+2 - 349 feet
Screen Diameter	12-inch 304 SS
Screen Length or perforations	340 – 400 feet
Tested Pumping Rate	1550 gpm
Pumping Water Level @ 72	152.51 feet
hours	
Drawdown after 72 hours	9.31 feet
pumping	
Tested Pumping Rate Pumping Water Level @ 72 hours Drawdown after 72 hours	340 – 400 feet 1550 gpm 152.51 feet

The well will not impact any of the above described elements and is properly constructed.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species - Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."

Determination: The well is located on the north end of Kalispell in a highly developed area. The Natural Heritage Program did not identify any threatened or endangered flora or fauna near the well location.

<u>Wetlands</u> - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

Determination: No impact

<u>**Ponds**</u> - For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

Determination: No impact

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.

Determination: The well is located on land that was historically irrigated. Drilling and use of the well will have no impact on soils in the area.

<u>VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS</u> - Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.

Determination: The drilling of the West View well does not promote weed growth.

<u>AIR QUALITY</u> - Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.

Determination: No impact

<u>HISTORICAL AND ARCHEOLOGICAL SITES</u> - Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.

Determination: The State Historic Preservation Office did not identify any historic or archeological sites in the vicinity of the well.

<u>DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY</u> - Assess any other impacts on environmental resources of land, water and energy not already addressed.

Determination: None

HUMAN ENVIRONMENT

<u>LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS</u> - Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.

Determination: Locally adopted plans and goals are the fundamental motivation for requesting the water use permit.

<u>ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES</u> - Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.

Determination: The drilling and future use of the well will have no impact to the quality of recreational or wilderness activities.

HUMAN HEALTH - Assess whether the proposed project impacts on human health.

Determination: No impact

<u>PRIVATE PROPERTY</u> - Assess whether there are any government regulatory impacts on private property rights.

Yes No X If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: No impact

<u>OTHER HUMAN ENVIRONMENTAL ISSUES</u> - For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.

Impacts on:

- (a) <u>Cultural uniqueness and diversity</u>?
- (b) Local and state tax base and tax revenues? Yes
- (c) Existing land uses? Yes
- (d) Quantity and distribution of employment? Yes
- (e) Distribution and density of population and housing? Yes
- (f) <u>Demands for government services</u>? Yes

- (g) Industrial and commercial activity? Yes
- (h) Utilities? Yes
- (i) <u>Transportation</u>? Yes
- (j) Safety? No
- (k) Other appropriate social and economic circumstances? Unknown
- 2. Secondary and cumulative impacts on the physical environment and human population:

Secondary Impacts: Population growth

Cumulative Impacts: A greater financial and commercial district

- 3. Describe any mitigation/stipulation measures: None
- 4. Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider: An alternative would be the same action in a different location. No action would limit future growth.

PART III. Conclusion

- 1. **Preferred Alternative:** As proposed, which is not an alternative.
- 2 Comments and Responses: None
- 3. Finding:

Yes___ No___ Based on the significance criteria evaluated in this EA, is an EIS required? No

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: No significant impacts have been identified, therefore no EIS is necessary.

Name of person(s) responsible for preparation of EA:

Name: James Albrecht

Title: Water Resources Specialist

Date: July 10, 2008